



# NLIT Summit 2007

**Tuesday, June 12, 2007—Presentations & Birds of a Feather**

**11:00-11:45 AM**

**Fiesta Rooms 1 & 2**

## **NWIS: Just Like Prego, It's in There**

**Robbie Evanoff, Sandia National Laboratories**

### **Bio**

Robbie Evanoff has been with Sandia National Laboratories for 15 years. She has a BBA in Management Information Systems and an MBA in Accounting. Robbie has worked her entire career at Sandia on various IT systems, with the last 10 years in project management of corporate wide IT applications. She has been with the NWIS Team since 2003.

### **Abstract**

The NetWork Information System (NWIS) is a component of Sandia's enterprise computing infrastructure that stores fundamental information about Sandia computers, network connections, computer accounts, email and post offices, networks and computer security plans.

NWIS enables computers and users to operate in a secure networked environment. NWIS provides data to and receives data from other resources including the corporate person table, directory, domain name servers, active directory, ARS, WebCARS, DHCP servers, and other computing infrastructure servers.

**11:00-11:45 AM**

**Fiesta Rooms 3 & 4**

## **Implementing Unified Messaging**

**Anita Brambley, Pacific Northwest National Laboratory**

### **Bio**

Anita Brambley is a Telecommunications Analyst for Pacific Northwest National Laboratory. Her responsibilities include short and long term telephony strategy planning and project oversight for telecommunications system replacement, new application technologies, and voice messaging. Anita has been at PNNL for 24 years and holds a Bachelors Degree in Management Information Systems from Washington State University.

### **Abstract**

A major improvement project completed in August 2006 placed Pacific Northwest National Laboratory (PNNL) on the forefront of voicemail technology by replacing their old voicemail system with a unified messaging product. To enhance research collaboration and staff productivity, unified messaging consolidates voicemail and email in one user inbox streamlining message retrieval, increasing response management, and

providing location independence. Just like PNNL, many organizations are facing the need to replace outdated voicemail systems that are no longer being supported by vendors. Discover the features which are most important to users, how to design architecture for your organization, and transition users to a robust unified communications platform while maintaining reliable telephone and voice message services for the Lab.

**11:00-11:45 AM**

**Enchantment Ballroom A**

### **Implementing Microsoft Live Communication Server 2005 at ORNL**

**Dennis Depp, Oak Ridge National Laboratory**

#### **Bio**

Dennis holds a bachelor's degree in Computer Science and Applied Mathematics from Indiana University of Pennsylvania (yes you read that correct) and a master's degree in Mathematics from University of Tennessee at Knoxville. (Go Vols!) He has over 15 years IT experience in the computer field. Most of that has been administering Windows servers. Dennis did serve as a Unix administrator for a brief period of time at DOE's Office of Science and Technology. Since his stint as a Unix Admin, the faulty implant has been replaced.

#### **Abstract**

In FY07, ORNL began an IT renewal project. The IT renewal project focused on bringing new technologies to ORNL's users. The first technology implemented was Microsoft's Live Communication Server. The goals for this project were

1. Provide a supported, lab-wide instant messaging client for ORNL.
2. Standardize on a single instant messaging client.
3. Deploy the client lab wide/integrate the client in our standard desktop.
4. Integrate the LCS client to work with ORNL's telephone system.

This talk will look at our deployment of LCS at ORNL, why we wanted to deploy LCS, and how well we did in meeting these goals.

**11:00-11:45 AM**

**Enchantment Ballroom B**

### **Network Update at Los Alamos**

**Dale Land, Los Alamos National Laboratory**

#### **Bio**

Dale Land has been working at LANL for 23 years. He has a BS in Computer Engineering and a MS in Computer Science. Dale had held a number of computing positions at the Laboratory and is currently the group leader for Network Engineering. This group is responsible for all institutional IP networks, core network services, and technical network cyber security.

#### **Abstract**

Los Alamos has five institutional networks to serve the needs of our research and operations staff. This talk will highlight some of the improvements that have been made and some future plans for network infrastructure, services, and technical cyber security.

**Windows XP Setup Disk****Roman Selever, Sandia National Laboratories****Bio**

Mr. Selever has fourteen year of professional experience in the Information Technology field. He has been working for SNL for over ten years now. He spent six and a half years as a Desktop Support Specialist in the CSU, two years as a Server Administrator with CSU Special Projects and has been with the Technology Development group (TechDev) for the past two years. Mr. Selevers' responsibilities with TechDev include the development and maintenance of the Windows XP Setup Disk, Sandia User Migration Utility and various other task specific applications.

**Abstract**

This presentation will cover Sandia's Windows XP Setup Disk used to deploy a standard, preconfigured XP image to corporate computers.

We will discuss

- The OS base for the disk.
- The new interface about to go into production.
- The driver sets we include to cover the various supported system brands and models.
- The different machine types that the disk can be used on.
- The different environments the disk can be used in.

**Evolution of a Test Capability for an ARS-Based Trouble-Ticketing System****Natalie Stroud, Sandia National Laboratories****Bio**

Natalie has 11 years of experience in IT/Desktop Support and has been at Sandia for 10 years, during which time she participated extensively in testing the last two major redesigns of Sandia's Remedy-based trouble ticketing system for the Computer Support Units (CSUs). She has a B.A. in English with a concentration in Professional Writing and is a Microsoft Certified Professional. She finds that testing software bears striking similarities to proofing documents and is looking forward to her new role as lead software tester for Sandia's Prod Tools team. Although she's never lived in the state of Missouri, Natalie considers herself the quintessential "show me" girl when it comes to testing the software she's responsible for.

**Abstract**

When Remedy Action Request System (ARS) was first implemented at Sandia for tracking IT support requests, testing was sparse; basic scenarios were documented and tested, but they were typically run prior to a new implementation, and more subtle bugs were primarily found after upgrades and changes went into Production. If the fix to problem A created problem B, that too was often not discovered until after the fix went to production.

When Enterprise Service Suite (ESS) was implemented nearly a year ago in the Remedy environment, we went from a system that could be configured in only one dimension to one that could be configured in three—resulting in 72 possible testing scenario sets. Additionally, while we had escalations and notifications in the old system, ESS made them configurable, so that added another ~1900 items to test. At go-live, we had ~650 users and now have grown to around ~1000. Given the increase in the system’s complexity and the increasing number of potential users affected, we knew we needed to do something to keep better track of “the state of the system”, as the written test scripts we developed for the initial implementation were proving cumbersome and unmaintainable. A few months after go-live, we picked up an automated testing tool, which has both helped us improve our ability to proactively find problems and sped up our ability to test the “work being done” portion of the functionality.

Join us for a talk about the evolution of our approach to testing for our trouble-ticket system, improvements we’ve made, the challenges we face, and where our approach to testing is going.

**1:00-1:45 PM**

**Fiesta Rooms 1 & 2**

### **Laptops on Foreign Travel**

#### **Susan Sackinger, Sandia National Laboratories**

##### **Bio**

Susan has been a CSU Project Manager for 10 years providing Project Management for IT projects, including CSU management, CSU remote site management, Laptops on ForeignTravel (LOFT), and the Yucca Mountain Project. She has worked at Sandia for 21 years and prior to this assignment, worked in R&D for Materials Science in the Center for Solder Sciences and Vacuum Arc Remelting. Susan was a significant contributor to the development of a Lead-Free solder patent.

Prior to joining Sandia, Susan worked at Motorola and R&D Associates in the field of Laser-electro Optics R&D.

#### **Charles Cote, Sandia National Laboratories**

##### **Bio**

Charles has been a CSU Project Manager for approximately 1 year providing Project Management for IT projects, including CSU management, CSU remote site management and Laptops on Foreign Travel (LOFT). He has worked at Sandia for 17 years and prior to this assignment, worked in the Technology Development group designing, developing and implementing automated tools to assist in the management of computer desktops. He also has many years experience designing, developing and implementing corporate-wide information systems.

##### **Abstract**

Staff on foreign travel often need access to computing resources and connectivity while on travel in order to accomplish their work. LOFT (Laptops on Foreign Travel) is a process developed at SNL to mitigate risks associated with using computing resources while on foreign travel.

**Berkeley Lab Automated Workstation Inventory****Craig Nelson, Lawrence Berkeley National Laboratory****Bio**

Craig Nelson is the Senior Infrastructure Architect for Lawrence Berkeley National Lab (LBNL), as well as supporting Active Directory as the AD Enterprise Admin. Craig has fifteen years experience in Information Technology and has been employed at LBNL for almost 2 years. Craig is a member of the Data Center Efficiency Committee at LBNL. He designed and currently supports the VMware ESX Infrastructure and oversees the conversion of existing physical servers to virtual machines at the lab. During his first year at LBNL, he helped design the Computer Inventory System for the lab. He also was responsible for writing VB code for the data collection portion of the system to XML. Prior to his employment with LBNL, Craig worked as a consultant for corporate IT environments in the SF Bay Area. Craig also worked on consulting projects for the Nevada Test Site, and both the LBNL and LLNL labs. He taught Windows technical support classes at both labs on multiple occasions over an eight year period.

**Dan Pulsifer, Lawrence Berkeley National Laboratory****Bio**

Dan Pulsifer has worked in the Information Technology field for the past twelve years, eight of which are with the Lawrence Berkeley National Laboratory (LBNL). Currently Dan supports LBNL's Mechanical CAD Infrastructure and manages the Engineering Organizational Unit (OU) within the Active Directory. There are over 500 desktops/servers in this OU with a mixture of Windows, Mac and Linux workstations. In addition to infrastructure management, Dan designs and programs in PHP, PERL and MySQL. He creates applications that are used by the Engineering Division as well as the Laboratory as a whole. Such applications include the LBNL Document Control Center, LBNL Software Site, LBNL Computer Inventory System, and a concurrent license tracking/management system. Prior to his employment with LBNL, Dan was an entrepreneur specializing in systems management and networking.

**Abstract**

Developed through a collaboration of the IT and Engineering Divisions at Berkeley Lab, the Computer Inventory System (CIS) at Lawrence Berkeley National Lab (LBNL) uses electronic data collected from member workstations to provide a mechanism for configuration control of computer assets.

Using open source tools, the CIS Web site displays inventory data from Linux, Mac, and Windows computers that are members of the Active Directory (AD) and a subset of data from computers not in the AD.

The goal was to build an infrastructure for managing computers in a decentralized laboratory environment without the cost of acquisition, implementation and integration of costly third-party products. Based on an agentless method for data collection, the software provides capabilities for hardware and software asset tracking, preventative maintenance, diagnostics, and management of the Labs Active Directory environment.

**Trends in Public Sector IT****Steve Wade, Kemtah (NLIT Summit Sponsor)**

**Bio**

With over 20 years in the IT industry, Stephen Wade is currently President of The Kentah Group. Kentah is an international IT services company doing business in 12 countries for Fortune 100 clients and government. Throughout his career, Mr. Wade has been instrumental in the development of new business lines and practices in emerging markets. He has provided strategic direction/development for a multitude of clients including Federal Express, The Food and Drug Administration, Sprint, the CIA, U.S. Navy, Office of Women’s Health, Office of Family Policy, and Toyota Motor Corporation. State clients include New Mexico, Washington State, District of Columbia, Montana, Arizona, North Carolina, Georgia, California, and many others. His consulting and strategic development efforts included research on new technology/trends, organizational and business impacts, cost-benefit analysis, and research on tools and applications. Prior to joining Kentah, Mr. Wade was an Executive Vice President overseeing operations, strategy, business development, and Mergers and Acquisitions for Tier Technologies, Inc. Tier is a publicly traded company providing outsourcing, electronic payment processing, and systems integration services to public sector clients. Prior to this appointment, Mr. Wade was Sr. Vice President of Tier’s Business Process Outsourcing Business Unit which provided outsourcing services for government clients. Prior to joining Tier, Mr. Wade was Director, Business Development at TRW.

**Abstract**

This presentation is focused on DOE operational leaders regarding current public sector trends and their application to the future of national research facilities. Drawing on his expertise in providing transaction and technology services to over 2000 public sector clients, Mr. Wade will discuss the emerging technologies, agency consolidation, IT centralization, rising demands, and scarce resources that are driving governments to rethink their operations. It will explore the challenges that an aging workforce places on both governments and industry. It will also address the importance of enterprise integration and data sharing to meet regulatory and technological changes.

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**1:00-1:45 PM**

**Enchantment Ballroom B**

**Defense in Depth Reporting at ORNL**

**Steve Parham, Oak Ridge National Laboratory**

**Bio**

Steve took his first programming job at the age of 16 and has enjoyed developing software ever since. He holds a BS degree in Computer Science. He has been working on the DOE Oak Ridge Reservation since 1990, including the last 6 years at Oak Ridge National Laboratory (ORNL). Steve is currently a member of the Software Applications Services group, where he has spent much of his time developing applications to support cyber security at ORNL.

**Abstract**

ORNL has a tool called the Cyber Security Report (CSR) that provides computer security related information on computing devices for any given organization at the laboratory.

This presentation will give a brief overview of the CSR, followed by a detailed description of recent additions to the CSR that support Defense-In-Depth (DID) reporting. This new functionality has proven to be a powerful tool for tracking compliance to DID requirements at ORNL and communicating this information to the user community.

**1:00-1:45 PM**

**Enchantment Ballroom C**

## **Managing Macs in an Enterprise**

**Brian Wallace, Oak Ridge National Laboratory**

### **Bio**

Brian Wallace has been working at the Oak Ridge National Laboratory for 23 years. He graduated from the University of Tennessee in 1972. He has over 30 years of computer experience working with micro computers, mainframes and various programming languages and operating systems. He was a co-founder of Eastern Computer which was one of the first Apple dealers in Tennessee in 1978. He has worked with Macs ever since their introduction in 1984. He currently works in the Back Office Infrastructure group at the Lab supporting web servers, Mac and Windows servers. He is responsible for the server infrastructure that supports the Mac portion of the Lab's Defense in Depth project.

### **Abstract**

Over the past year, the Oak Ridge National Laboratory has gone from an environment where Macs were managed by policy only to an environment where Macs are centrally managed and tracked for compliance with our Defense in Depth program. This presentation will discuss the problems and successes that we have had during this transition and the tools that we have used and developed to accomplish the goals of Defense in Depth.

**1:00-1:45 PM**

**Enchantment Ballroom D**

## **Red Hat Enterprise Linux 5**

**Rick Ring, Red Hat (NLIT Summit Sponsor)**

### **Bio**

Rick is a recent addition to the Red Hat Solution Architect team. He has BS in Computer Science and Math and an MS in Operations Research. Previously Rick worked at SGI for 11 years as a Systems Engineer. Prior to that he worked for a defense contractor developing software and served in the Air Force. Rick is a Red Hat Certified Engineer, lives in Colorado Springs, and supports the Red Hat Federal Team.

### **Abstract**

Red Hat Enterprise Linux 5, released in early 2007, provides the latest open source software technologies, which offer improved performance, security and flexibility and introduces integrated virtualization capabilities for operating systems and data. The subscription-based packaging has also been simplified and streamlined. This presentation provides a summary of a few of these enhancements.

- Enhanced functionality throughout the 1200 components that make up the product.
- Security: Unmatched resistance to security exploits through the inclusion of Multi-Level Security profiles and improved compiler and runtime buffer management technologies.
- Desktop and productivity: Dramatically improved desktop capabilities and new application development tools make working in a Red Hat Enterprise Linux environment better than ever.
- Performance and scalability: Extensive enhancements to the kernel, network and I/O subsystems ensure optimal performance using the latest hardware systems.

- Simplified packaging: Red Hat Enterprise Linux packaging has been streamlined to eliminate the former AS/ES/WS variants, making it easier to deploy.
- Servers:
  - ◇ Red Hat Enterprise Linux Advanced Platform - provides comprehensive server and storage virtualization capabilities for servers of any size. Existing Red Hat Enterprise Linux AS customers will automatically move to Red Hat Enterprise Linux Advanced Platform when they renew their subscriptions.
  - ◇ Red Hat Enterprise Linux - for servers with up to 2 processor sockets, provides traditional Enterprise Linux functionality and all the latest features, including virtualization. Existing Red Hat Enterprise Linux ES customers will automatically move to Red Hat Enterprise Linux when they renew their subscriptions.
- Clients:
  - ◇ Red Hat Enterprise Linux Desktop - provides extensive client capabilities in a single product, which can be enhanced with a pair of options: Workstation and Multi-OS. Red Hat Enterprise Linux WS customers will automatically move to Red Hat Enterprise Linux Desktop with the Workstation option when they renew their subscriptions.

**2:00-2:45 PM**

**Fiesta Rooms 1 & 2**

## **Lean Green Virtual Technology**

**Jeremy Allison, Sandia National Laboratories;**

### **Bio**

Jeremy Allison has been at SNL for almost 3 years. He has been in the computer industry for 10 years. Jeremy is currently working to virtualize the data center in his area using VM's ESX server.

**Jeremy Baca, Sandia National Laboratories**

### **Bio**

Jeremy Baca is a Lead Server Manager and Team Lead for LMIT at Sandia National Laboratories. He manages 19 servers and oversees a small team of technicians. He also works on the Cyber Forensics Team. He has obtained his GSEC, GCIH and GGSC security certifications from the SANS Institute and is a SANS Stay Sharp Instructor. He has also taken advanced and expert courses in computer forensics at Guidance. He has worked in a number of different server-management and security related roles at Sandia for the past 11 years.

### **Abstract**

Virtual technology is an emerging solution to shrinking budgets and rising server costs allowing us to leverage the full power of a machine. Already underutilized servers face retirement and replacement with multi-core processors and larger quantities of RAM. We are using virtual technology to not only utilize these unused resources, but also to reduce our electrical and cooling costs. By consolidating our datacenter into a ESX VM cluster we have eased administration time, made new builds easier, and have made the machine refresh process seamless to us and the users. Our environment includes 2 ESX host servers a Virtual Infrastructure server and a NAS serving ISCSI targets.

**2:00-2:45 PM**

**Fiesta Rooms 3 & 4**

**Quarantine: Controlling Network Access Using DHCP**

**James Calloway, Oak Ridge National Laboratory**

**Bio**

James has enjoyed computing since his days with BASIC on a Commodore 64. He holds a BS in Chemical Engineering and a MS Degree in Computer Science. James has been working for ORNL since 2001 starting out as a UNIX Systems Administrator. James is currently part of the Software Applications Services group with his primary focus being on applications for the Networking group.

**Abstract**

In this presentation, I will discuss the ORNL Quarantine process. Quarantine is a DHCP-driven process for separating devices which are not currently meeting ORNL Cyber Security requirements into a separate portion of the ORNL network with limited access.

A user whose device is quarantined has the ability to self-remedy their situation and can usually return to normal network access fairly quickly without requiring the intervention of IT personnel.

This talk will describe the various phases of quarantine, how we are using DHCP to facilitate the process, and our experiences thus far.

**2:00-2:45 PM**

**Enchantment Ballroom A**

**Device Consolidation/Unified Threat Management**

**Richard Stiennon, gvTechSolutions (NLIT Summit Sponsor)**

**Bio**

Richard Stiennon, Chief Marketing Officer, has more than 25 years of experience in industry. An acknowledged thought leader, he is perhaps best known for his tenure as Vice President of Research for Gartner's Security and Privacy group, where he regularly provided strategic counsel to Global 2000 CIOs and earned Gartner's Thought Leadership Award for 2003. He was most recently the Founder and Chief Research Analyst of IT-Harvest, Inc., an independent IT research firm. Prior to IT Harvest, Richard was Vice President of Threat Research for Webroot Software, Inc. He holds several patents and has garnered prestigious industry designations, including being named one of the "50 Most Powerful People in Networking" by Network World magazine. Richard earned a B.S. degree in aerospace engineering from the University of Michigan.

**Abstract**

This manufacturer, Fortinet, has taken existing solutions such as Firewall, VPN, IPS, Content Filtering, AV, etc. and consolidated those functions into one device. It is easier to manage, much less costly than having multiple support and renewal contracts, and easier to deploy as all functions are from the same manufacturer. This has not worked in the past because of bandwidth/processing issues. But they are manufacturing this new device with a ASYNC design that puts all processing power on the motherboard - which is actually faster than existing, stand alone solutions. The labs have told us that cost and resource management are big issues, plus NIAP certification is moving up on the "check list". This handles all of those issues.

**2:00-2:45 PM**

**Enchantment Ballroom B**

**Directory Services Account Provisioning**

**Bill Claycomb, Sandia National Laboratories**

**Bio**

Bill Claycomb has been at Sandia in various capacities since 1993. He has a M.S. in computer science from New Mexico Tech, and is currently pursuing a Ph.D. there as well. Bill has been with the Infrastructure Computing Systems/Services department since 2003, where he develops applications for directory services management, as well as system administration and automation. Bill has published various technical papers related to system administration, directory services, and mobile device authentication and access control.

**Abstract**

The process of provisioning and maintaining domain accounts is a complex and dynamic task. This presentation will discuss SNL's approach to account provisioning within Active Directory. The presentation will also describe the challenges we have faced, the capabilities we have leveraged, and the solutions we have been able to provide not only to our own organization, but other organizations that utilize directory services for account information.

**2:00-2:45 PM**

**Enchantment Ballroom C**

**Enterprise Management and Security Integration**

**Todd Bruner, Sandia National Laboratories**

**Bio**

Todd Bruner has been working at Sandia since 2002. In his 15 years of professional experience he has worked for large corporations and small startups doing systems administration, software development, intrusion detection, and security research. Mr. Bruner has a Bachelors degree in Computer Science, Physics, and Mathematics. Todd was the original architect for Sandia's cyber enterprise management (CEM) system and is the project lead for the CEM team's development efforts.

**Abstract**

Highlighting Sandia's experiences integrating security monitoring and enterprise management, this presentation explores the history of Sandia's Integrated Network Security and Reliability Center, the capabilities of the Center and the enterprise management system, and how enterprise management capabilities enhance cyber security efforts.

**2:00-2:45 PM**

**Enchantment Ballroom D**

**How to Select a Disaster Recovery Site**

**Donald Bragg, Sandia National Laboratories**

**Bio**

Donald Bragg has been at Sandia National Laboratories for 17 years. He has a BS in Computer Science and is the Project Lead of Enterprise Unix Systems Team and a member of Sandia's IT Disaster Recovery and Busi-

ness Continuity program team. He has an Associate Business Continuity Professional (ABCP) certification from the Disaster Recovery Institute International.

### **Abstract**

The need to quickly and efficiently resume operations following a disruption at a primary operating location is a necessary one. Therefore, selection of a Disaster Recovery site is a complex process. In order to fully address the requirements, it must take into consideration environmental, geographic, geological, technical, financial, regulatory, and political factors. In 2006, Sandia National Laboratories undertook such a study. A number of commercial and government operated facilities were examined to determine their feasibility of being designated a recovery site for the Laboratories IT operations. This paper addresses the development of evaluation criteria, grading process, and final selection of an alternate site.

**3:00-3:45 PM**

**Fiesta Rooms 1 & 2**

### **Global IT Transformation**

**Ray Appel, Hewlett-Packard (NLIT Summit Sponsor)**

#### **Bio**

Ray's team at HP provides strategic technology infrastructure architecture advisory and presales proof-of-concept consulting services for many of HP's largest enterprise customers in the Western US, Canada and Latin America. He has been with HP for 20 years in various presales technical, consulting, and management roles, including managing both the Compaq Great Lakes and West Region Enterprise Consulting Services business unit for five years.

#### **Abstract**

Clear and efficient IT policy & governance Focus on few active projects to deliver more faster Provide consistent IT metrics Rigorous planning with the business = elimination of costly excursions Enterprise Data Warehouse Global Data Center consolidation Elimination of redundant or "unnecessary" work Leverage IT as a single entity for better pricing and support from vendors Identify and accelerate standardization of IT Global and common systems increase to 80% of development

**3:00-3:45 PM**

**Fiesta Rooms 3 & 4**

### **Evolving Collaboration in Traditionally Closed Environments**

**Monzy Merza, Sandia National Laboratories**

#### **Bio**

Monzy Merza has been working at SNL for over 7 years. He is a member of the Vulnerability Assessment team of the Cyber Monitoring and Analysis group.

#### **Abstract**

Solving National and Global problems demands collaboration and flexible access to information resources while maintaining high levels of security confidence. The enabling challenge is compounded by shrinking budgets, growing threats, and increased number of intrusions. This presentation offers a usable model for the Evolution of a Collaborative Enterprise.

**3:00-3:45 PM**

**Enchantment Ballroom A**

### **SMS 2003 and Software Distribution**

**Stana Kopczuk, Sandia National Laboratories**

#### **Bio**

Stana Kopczuk has worked at Sandia Labs for 11 years starting with Desktop Support in the Computer Support Unit, supporting Oracle Manufacturing Application, and currently a programmer for the Network Information System Production Tool integrating Desktop Management Software into SNLs corporate system.

#### **Abstract**

Describe software distribution methods at Sandia National Laboratories using Microsoft's Systems Management Server 2003 (SMS). This includes describing advertisement setups, package setups, Dynamic Query collection creation and how SMS patching and client installation exemptions are honored on specific machines registered in NWIS.

**3:00-3:45 PM**

**Enchantment Ballroom B**

### **Effectively Meeting Security Requirements through KVM Technology**

**Brian Martinez, Los Alamos National Laboratory**

#### **Bio**

Brian Martinez has 16 years of technology management and computing experience working with Los Alamos and Sandia National Laboratories. Ten years of experience working on classified computing systems and networks, 6 of these years working directly with KVM technology. Brian was instrumental on the planning, design, and implementation of the KVM infrastructure for the Weapons Engineering complex which now serves as a proven architecture for the institutional cyber security strategy. Brian is currently the Team Leader for the Weapons Engineering Computer Support Team at Los Alamos National Laboratory. Brian and his team have received numerous LANL awards and outside recognition pertaining to the team's secure classified implementations.

#### **Abstract**

Cyber-Security management is the cornerstone of any national security institution. The high rate of emerging technology makes it very challenging to continuously adapt security requirements. USB and Firewire ports and their connecting devices are some of the security risks we have seen appeared over the last few years. Many technological approaches have been devised to resolve these vulnerabilities some more successfully than others based on their application.

This presentation provides an introduction into a KVM implementation at the Los Alamos National Laboratory. This installation has been in place for over five years and has successfully pass all audits. It has been showcased multiple times to other agencies and Laboratories across the complex because of its security advantages. The presentation focuses on the system architecture and some of the tools and procedures developed for implementation. If you are considering a secure implementation or are in the process of setting up a KVM system, you won't want to miss this opportunity!

**3:00-3:45 PM**

**Enchantment Ballroom C**

### **Remote Data Center Management**

**Joseph Brenkosh, Sandia National Laboratories**

#### **Bio**

Joseph Brenkosh has been working in the Information Technology field for over 25 years. He has a MS in Computer Science. Joe is a Cisco Certified Network Professional and is also a Cisco Certified Design Professional. Joe is currently the project lead for the Out-of-Band Network which is used to manage the production networks at SNL. He is also the project lead for the SecureNet Network which is used to provide networking connectivity to the DOE weapons labs and factories. Prior to joining SNL, Joe worked at Bell Laboratories.

#### **Abstract**

The ability to remotely manage a data center is important to maintain continuity of operations. If the data center were to be destroyed, there is no workaround other than full redundancy. Should a data center become uninhabitable due to a natural disaster, Nuclear, Biological, or Chemical attack or threat thereof, the data center may range from partially to fully functional. However, it can not be staffed due to safety reasons.

This paper presents a design for making a data center remotely manageable. It analyzes the functions of a data center from the perspective of the ISO FCAPS model which includes Fault Management, Configuration Management, Accounting Management, Performance Management, and Security Management. It then presents how these functions can be performed remotely using a variety of methods including: out-of-band management, KVM over IP, X Windows, distributed servers, dual-homing, and routing and tunneling protocols, and encryption.

**3:00-3:45 PM**

**Enchantment Ballroom D**

### **Linux Standard Build at LLNL**

**Kevin Simmons, Lawrence Livermore National Laboratory**

#### **Bio**

Kevin Simmons has been working in the IT industry for over 25 years, the last seven at LLNL. He currently leads the Linux integration and standards team at LLNL. Prior to joining LLNL, Kevin worked at Digital Equipment Corporation for 17 years as a network management consultant and support engineer.

#### **Abstract**

The Linux Standard Build at LLNL, or "uLoad", is a Red Hat Linux system designed for the workstation or desktop environment. It consists of hardening and scanning mechanisms based on The Center for Internet Security/LLNL. The uLoad is a network based installation that, once built, integrates with Active Directory for user and computer policy management, Patching and Software Delivery through LLNL's Red Hat Network servers, and LANdesk for C&A reporting. It incorporates custom "Firstboot" programs to aid the Linux Administrator with integration with these various institutional tools. A detailed description of the various components and installation mechanisms will be presented, as well as screen shots of the various Administrative tools used for integration.

**4:00-4:45 PM**

**Fiesta Rooms 1 & 2**

## **Network Access Control at ORNL**

**Paige Stafford, Oak Ridge National Laboratory**

### **Bio**

Paige Stafford has been working at ORNL for the past seven years. She has a masters degree in computer science from the University of TN, Knoxville. She was hired at ORNL in May of 2000 to migrate the network to a dynamic environment. This included implementing dynamic DNS and the Network Registration systems. Her current work involves managing DNS and DHCP services, as well as development in network access control, and other business applications.

### **Abstract**

Although DHCP can facilitate network access (who gets what IP) and accountability (DHCP logs mapped to network registration), it has no impact on statically configured clients, and therefore cannot enforce network policy for all hosts on a network. ORNL needed a way around this that would be simple, non-intrusive to the client or network, and not cost prohibitive.

The solution that ORNL has come up is a home-grown Network Access Control (NAC) system that monitors the network and flags in-appropriate network access. The NAC system combines SNMP, DHCP, scanning tools, and network registration to poll the network and verify that each active host complies with ORNL's network rules.

In this presentation, I will discuss details of the current state of development, the function and design, and the proposed implementation of ORNL's NAC system.

**4:00-4:45 PM**

**Fiesta Rooms 1 & 2**

## **LogJAMM: Logs Are Just Another Monitoring Mechanism**

**Paul Sery, Sandia National Laboratories**

### **Bio**

Paul Sery has a BS in electrical engineering from the University of New Mexico, 1981, and has been working at SNL/NM for 9 years. He was a system administrator for over 20 years and started developing the Central Logging (LogJAMM), Diskless Linux projects in 2005 and the Linux USB/Firewire Port-blocker project in 2007. He is the author of Linux Network Toolkit, Red Hat Linux Network Toolkit, Knoppix for Dummies and Ubuntu Linux for Dummies.

### **Abstract**

LogJAMM is a centralized log aggregation and analysis system. It currently provides the mechanism that helps administrators systematically read and understand their logs. LogJAMM is progressing towards providing automatic anomaly detection.

**4:00-4:45 PM**

**Enchantment Ballroom A**

**AbSD Architecture Helps Turn IT Generalists into Gurus**

**Josh Pollock, KACE (NLIT Summit Sponsor)**

**Bio**

Josh Pollock is the western regional manager and a senior systems engineer at KACE Networks™, responsible for overall product strategy and development of KACE technologies. Prior to KACE, Josh was a senior systems engineer for Moonlight Systems which was acquired by Patchlink in 2005. Previous to Moonlight Systems, he ran the business services division for Red Shift Internet Services, a regional ISP covering over 60 cities. At KACE, Josh guided an engineering team on development of the KBOX™ Series 1000 System Management Appliance, which was recognized in 2007 at the Microsoft Management Summit as the “Most Innovative Product”. Josh is an accomplished speaker, and has spoken at Data Connectors IT Management shows and at several Warranty Week Conferences, and is also an active member of the League of Professional System Administrators. He holds a BS degree in business management from the University of Phoenix, and has earned a Cisco Certified Network Professional certification.

**Abstract**

The current experience with traditional enterprise software implementations, as well as all the related issues surrounding hardware systems, leaves a desire for options to ease software development, testing, deployment, and maintenance. Appliance-based Software Delivery (AbSD) enables a simplified approach to dealing with software delivery and systems management.

AbSD combines three tiers of systems management: application services, operation services and an operating environment in a single hardware appliance. This structure creates an innovative approach that addresses the problems of reliability, complexity, and cost that are current issues with traditional and SaaS delivery methods.

Josh Pollock, Senior Systems Engineer at KACE™, will address the structure, problems addressed, and applicability of AbSD in resolving current and projected issues with software delivery.

**4:00-4:45 PM**

**Enchantment Ballroom B**

**CID—CEM (Classified Electronic Media) Inventory Database**

**Heather Robideau, Sandia National Laboratories**

**Bio**

Heather Robideau started at Sandia National Laboratories in 1995 as a student intern. She enlisted in the United States Army and left Sandia for active duty training and returned to complete her enlistment in the Army Reserve and continue employment at SNL. She has been involved with classified computing ever since and is also a Unix Systems Certified Professional. She is currently participating in the development of and training for several new applications designed to automate and enhance computer security procedures, classified processing, and high-performance computing procedures for which the team has won several awards including the Sandia President’s Quality Award for 2006.

## **Abstract**

CID is a database-backed web application designed to track active classified electronic media. CID is not meant to actively detect the removal or insertion of classified media on a real-time basis. Instead, its purpose is to prevent mistakes and offer new classified tracking capabilities by providing a consistent, centralized mechanism for conducting automated electronic inventories of media on a regular basis and in an auditable fashion.

**4:00-4:45 PM**

**Enchantment Ballroom C**

### **BIRDS OF A FEATHER—NNSA Diskless Solutions**

**Ronald Crotzer, Los Alamos National Laboratory**

#### **Bio**

Ronald L. Crotzer is a Computer Technician for the Los Alamos National Laboratories' Computing, Telecommunications, and Networking (CTN) Division. For the last eight years, he has provided Windows OS support for the Laboratories Applied Physics Division. Ron is currently responsible for the installation, operation, and maintenance of six Ardence servers providing diskless Windows for 100+ desktops. His 17 years of experience at the Laboratory also include employment as a Mechanical Technician and as a Journeyman Machinist.

#### **Abstract**

I would like to propose a "Birds of a Feather" on the subject of what the different DOE sites are doing to comply with Disk-less requirements. Some Topics should include:

- progress made since last years Disk-less Birds of a Feather,
- what is working well and what is not working well with the implementation of the different technologies of choice (i.e. poor video, not enough video resolution, retrofitting infrastructure, not scalable, speed, and so on),
- newest technologies (what kind of new solutions are you looking at) in KVM solutions, thin clients and blade technology, Ardence, and other disk-less UNIX, Windows, and Mac solutions.

### **BIRDS OF A FEATHER—Diskless Workstation Effort**

**James McDonald, Sandia National Laboratories**

#### **Bio**

James McDonald has been working for Sandia National Laboratories for going on 6 years. He is a Microsoft Certified System Administrator. James is currently working with the Thin computing team deploying and administering both Ardence and Citrix technologies. Prior to working at Sandia National Laboratories James was a Certified Tech at CompUSA for 4 years.

#### **Abstract**

Giving people time to interact to talk about what has worked in the diskless realm, what has not worked, what technologies are being looked at for possible future use. Topics could include:

- Ardence
- Citrix

- Clear Cube
- Storage
- Software Streaming and other diskless concerns

**4:00-4:45 PM**

**Enchantment Ballroom D**

**BIRDS OF A FEATHER—Customer Communication**

**Charles Shirley, Sandia National Laboratories**

**Bio**

Charles Shirley has been at Sandia for 24 years and is a Distinguished Member of Laboratory Staff. He has been with the Computer Support Units, working in customer communication, for more than 11 years. Previous work areas included a project management office responsible for large pulsed power accelerators, editorship of the employee newspaper, and communication support for the executive staff. Charles has a master's degree in physics and a PhD in English, which obviously explains how he wound up in IT.

**Abstract**

Share ways you use to communicate with customers about services, deployments/patches, user satisfaction, and other aspects of the customer experience.

**4:00-4:45 PM**

**Pavilions I, II, II**

**BIRDS OF A FEATHER—Collaboration**

**Cynthia Caton, Sandia National Laboratories**

**Bio**

Cynthia Caton has worked at Sandia National Laboratories for 22 years. During this timeframe, she has worked in weapons sub-systems, design definition, and for the past 10 years with the Computer Support Units (CSU) department. When Cynthia came to the CSU department, her focus was on developing consistent processes and defining performance metrics for the CSUs. Currently, she is a CSU Project Manager. Most recently, Cynthia led a team that developed and implemented a quality management system for the groups comprising Computing Support Services (CSS), achieving ISO9001:2000 certification in March 2007.

**Mary-Bernadette Garza, Sandia National Laboratories**

**Bio**

Mary-Bernadette Garza has been working as an SAIC employee at Sandia National Laboratories for nearly 5 years. During this timeframe, she has worked primarily on business process improvement projects. When Mary-Bernadette came to the CSU department, her emphasis was to support process documentation and improvement efforts that started on a smaller scale and developed into a much larger endeavor resulting in the achievement of ISO9001:2000 certification in March 2007. In addition, her current studies in Organizational Learning and Instructional Technology have led her to seize opportunities to infuse concepts related to knowledge management as appropriate. Her desire is to foster further adoption of these concepts to build an effective collaborative environment within the organizations she supports. Mary-Bernadette is a Master's candi-

date with an expected graduation date of Dec 2007 and was a LAN Manager in San Antonio, TX prior to being contracted to Sandia in 2001.

## **Abstract**

Share some of the ways others have utilized different strategies and technologies for promoting and fostering collaborative efforts. This may range from supporting all phases of a project lifecycle to performing daily operational collaboration. We would like to explore how the Labs maximize existing and emerging technologies such as SharePoint, Lotus, or other collaborative tools to capture and share relevant artifacts.

Other subtopics could include:

- utilizing the artifacts to support continual improvement efforts
- generating individual and team participation
- moving from email to discussion boards, blogs, and wikis
- approaches used for planning and designing the online environment (i.e. Knowledge Management (KM) theory, Business Process Management (BPM) methodology, etc.)